APPENDIX W

LAND EVALUATION SITE ASSESSMENT

GPA 04-06; SP 04-006; R04-013; VTM5381; S04-035, S04-036, S04-037, S04-038; Log No. 04-08-028; SCH No. 2004091166

for the

DRAFT ENVIRONMENTAL IMPACT REPORT

August 2007

MERRIAM MOUNTAINS SPECIFIC PLAN

LAND EVALUATION SITE ASSESSMENT

October 2006

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NOTES

Part 1

1. 2,327 acres
2-9. See land evaluation worksheet.

Part 2

See land evaluation worksheet.

Calculation of the Land Evaluation (LE) Score

Part 1. Land Capability Classification (LCC) Score:

(1) Determine the total acreage of the project.
(2) Determine the soil types within the project area and enter them in **Column A** of the **Land Evaluation Worksheet** provided on page 2-A.
(3) Calculate the total acres of each soil type and enter the amounts in **Column B**.
(4) Divide the acres of each soil type (**Column B**) by the total acreage to determine the proportion of each soil type present. Enter the proportion of each soil type in **Column C**.
(5) Determine the LCC for each soil type from the applicable Soil Survey and enter it in **Column D**.
(6) From the LCC Scoring Table below, determine the point rating corresponding to the LCC for each soil type and enter it in **Column E**.

LCC Scoring Table

LCC Class	I	IIe	IIs,w	IIIe	IIIs,w	IVe	IVs,w	V	VIe,s,w	VIIe,s,w	VIII
Points	100	90	80	70	60	50	40	30	20	10	0

(7) Multiply the proportion of each soil type (**Column C**) by the point score (**Column E**) and enter the resulting scores in **Column F**.
(8) Sum the LCC scores in **Column F**.
(9) Enter the LCC score in box <1> of the **Final LESA Score Sheet** on page 10-A.

Part 2. Storie Index Score:

(1) Determine the Storie Index rating for each soil type and enter it in **Column G**.
(2) Multiply the proportion of each soil type (**Column C**) by the Storie Index rating (**Column G**) and enter the scores in **Column H**.
(3) Sum the Storie Index scores in **Column H** to gain the Storie Index Score.
(4) Enter the Storie Index Score in box <2> of the **Final LESA Score Sheet** on page 10-A.

Land Evaluation Worksheet

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
AcG	1132.2	0.487	VIII	0	0	<10	<4.87
CmE2	177.9	0.076	VII	10	0.76	10	0.76
CmrG	701.1	0.301	VII	10	3.01	<5	<1,505
CnE2	85.9	0.037	VIII	0	0	18	0.666
CnG2	15.1	0.006	VIII	0	0	7	0.042
EsC	4.5	0.002	III	10	0.14	51	0.102
Totals	—	(Must Sum to 1.0)		***LCC Total Score***	—	***Storie Index Total Score***	—

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
			1132.2
			177.9
			701.1
			85.9
			15.1
		4.5	
Total Acres	—	—	—
Project Size Scores	—	—	—

Highest Project Size Score —

Land Evaluation Worksheet

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
FaD2	11.9	0.005	IVe	50	0.25	48	0.24
FaE2	5.5	0.002	VIe	20	0.04	35	0.07
FxG	22.4	0.010	VII	10	0.10	< 5	< 0.05
LpD2	4.8	0.002	IVe	50	0.10	33	0.066
LpE2	7.6	0.003	VIe	20	0.06	26	0.078
LrE	44.0	0.019	VIe	20	0.38	24	0.456
Totals	—	(Must Sum to 1.0)		***LCC Total Score***	—	***Storie Index Total Score***	—

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
			11.9
			5.5
			22.4
			4.8
			7.6
			44.0
Total Acres	-	-	-
Project Size Scores	—	—	—

Highest Project Size Score —

Land Evaluation Worksheet

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
LrG	24.9	0.011	VIIe	10	0.11	8	0.088
PeC	7.5	0.003	IVe	50	0.15	49	0.147
PeC2	2.6	0.001	IVe	50	0.05	44	0.044
PeD2	0.0	0.000	IVe	50	0.00	41	0.000
RaC2	16.0	0.007	IIIe	70	0.49	51	0.357
RaD2	4.4	0.002	IVe	50	0.10	48	0.096
Totals	—	(Must Sum to 1.0)		***LCC Total Score***	—	***Storie Index Total Score***	—

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
			24.9
			7.5
			2.6
			0.0
		16.0	
			4.4
Total Acres	—	—	—
Project Size Scores	—	—	—

Highest Project Size Score [—]

Land Evaluation Worksheet

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
VaB	20.6	0.009	IIe	90	0.81	81	0.729
VvE	33.1	0.014	IVe	20	0.28	27	0.378
WmC	5.0	0.002	IIe	90	0.18	77	0.154
Totals	2,327	(Must Sum to 1.0)		***LCC Total Score***	7.01	***Storie Index Total Score***	<10.898

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
	20.6		
			33.1
	5.0		
Total Acres	25.6	20.5	2,280.9
Project Size Scores	50	30	100

Highest Project Size Score 100

NOTES

Calculation of the Site Assessment (SA) Score

Part 1. Project Size Score:.

(1) Using **Site Assessment Worksheet 1** provided on page 2-A, enter the acreage of each soil type from **Column B** in the **Column - I, J or K** - that corresponds to the LCC for that soil. (Note: While the Project Size Score is a component of the Site Assessment calculations, the score sheet is an extension of data collected in the Land Evaluation Worksheet, and is therefore displayed beside it).
(2) Sum **Column I** to determine the total amount of class I and II soils on the project site.
(3) Sum **Column J** to determine the total amount of class III soils on the project site.
(4) Sum **Column K** to determine the total amount of class IV and lower soils on the project site.
(5) Compare the total score for each LCC group in the Project Size Scoring Table below and determine which group receives the highest score.

Project Size Scoring Table

Class I or II		**Class III**		**Class IV or Lower**	
Acreage	Points	Acreage	Points	Acreage	Points
>80	100	>160	100	>320	100
60-79	90	120-159	90	240-319	80
40-59	80	80-119	80	160-239	60
20-39	50	60-79	70	100-159	40
10-19	30	40-59	60	40-99	20
10<	0	20-39	30	40<	0
		10-19	10		
		10<	0		

(6) Enter the **Project Size Score** (the highest score from the three LCC categories) in box <3> of the **Final LESA Score Sheet** on page 10-A.

NOTES

- Two potable water tanks are located within the project boundary.
- Water pipelines from the above tanks are located onsite and extend offsite.
- The water tanks and associated pipelines were built in response to surrounding needs to serve adjacent land uses. The tanks and pipelines do not currently serve the project area. They were placed within the project site in an effort to expand Vallecitos Water District (VWD) services in the area.
- Onsite riparian water is not sufficent to support agricultural production.
- Through communications with property owners it is known that two water wells are located on the Jimenez property that were previously used in support of residential/trailer use and goat raising activities. The total property area consists of 41.2 acres. No water lines are known to be located within this property. These water wells are no longer in use.
- VWD doesn't supply reclaimed water, only potable water. However it is known that the potable water is used for irregation purposes in the surrounding areas.
- No known sources of irregation exist onsite except for:
  - 2.4 acres of land from encroaching agricultural production.
  - 5.3 acres of greenhouse operations that occur in the southern portion of the project site.

Part 2. Water Resource Availability Score:

(1) Determine the type(s) of irrigation present on the project site, including a determination of whether there is dryland agricultural activity as well.

(2) Divide the site into portions according to the type or types of irrigation or dryland cropping that is available in each portion. Enter this information in **Column B** of **Site Assessment Worksheet 2. - Water Resources Availability**.

(3) Determine the proportion of the total site represented for each portion identified, and enter this information in **Column C**.

(4) Using the Water Resources Availability Scoring Table, identify the option that is most applicable for each portion, based upon the feasibility of irrigation in drought and non-drought years, and whether physical or economic restrictions are likely to exist. Enter the applicable Water Resource Availability Score into **Column D**.

(5) Multiply the Water Resource Availability Score for each portion by the proportion of the project area it represents to determine the weighted score for each portion in **Column E**.

(6) Sum the scores for all portions to determine the project's total Water Resources Availability Score

(7) Enter the Water Resource Availability Score in box <4> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 2. - Water Resources Availability

A	B	C	D	E
Project Portion	Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score (C x D)
1	Not Irregated	0.997	0	0
2	VWD Irregated (green-house)	0.002	80	0.16
3	VWD Irregated (encroachi agriculture	0.001	80	0.08
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	0.24

Water Resource Availability Scoring Table

Option	Non-Drought Years			Drought Years			WATER RESOURCE SCORE
	RESTRICTIONS			RESTRICTIONS			
	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	
1	YES	NO	NO	YES	NO	NO	100
2	YES	NO	NO	YES	NO	YES	95
3	YES	NO	YES	YES	NO	YES	90
4	YES	NO	NO	YES	YES	NO	85
283 → (5)	YES	NO	NO	YES	YES	YES	80
6	YES	YES	NO	YES	YES	NO	75
7	YES	YES	YES	YES	YES	YES	65
8	YES	NO	NO	NO	--	--	50
9	YES	NO	YES	NO	--	--	45
10	YES	YES	NO	NO	--	--	35
11	YES	YES	YES	NO	--	--	30
12	Irrigated production not feasible, but rainfall adequate for dryland production in both drought and non-drought years						25
13	Irrigated production not feasible, but rainfall adequate for dryland production in non-drought years (but not in drought years)						20
1 → (14)	Neither irrigated nor dryland production feasible						0

NOTES

Part 3. Surrounding Agricultural Land Use Score:

(1) Calculate the project's Zone of Influence (ZOI) as follows:

(a) a rectangle is drawn around the project such that the rectangle is the smallest that can completely encompass the project area.

(b) a second rectangle is then drawn which extends one quarter mile on all sides beyond the first rectangle.

(c) The ZOI includes all parcels that are contained within or are intersected by the second rectangle, less the area of the project itself.

(2) Sum the area of all parcels to determine the total acreage of the ZOI.

(3) Determine which parcels are in agricultural use and sum the areas of these parcels

(4) Divide the area in agriculture found in step (3) by the total area of the ZOI found in step (2) to determine the percent of the ZOI that is in agricultural use.

(5) Determine the Surrounding Agricultural Land Score utilizing the Surrounding Agricultural Land Scoring Table below.

Surrounding Agricultural Land Scoring Table

Percent of ZOI in Agriculture	Surrounding Agricultural Land Score
90-100	100
80-89	95
70-79	90
65-69	85
60-64	80
55-59	70
50-54	60
45-49	50
40-44	40
35-39	30
30-34	20
20-29	10
<19	0

(5) Enter the Surrounding Agricultural Land Score in box <5> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 3.
Surrounding Agricultural Land and Surrounding Protected Resource Land

A	B	C	D	E	F	G
Zone of Influence						
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (A/B)	Percent Protected Resource Land (A/C)	Surrounding Agricultural Land Score (From Table)	Surrounding Protected Resource Land Score (From Table)
8,095	2,680	405	33.1	5.0	20	0

Note: The total acreage for Williamson Act Agricutural Preserve Lands (which consist of 164 acres, as shown in Figure 1) was added to both colum B (Acres in Agriculture) and colum C (Acres of Protected Resource Land) since agricultural production currently exists within these lands and Williamson Act lands are counted as Protected Resource Lands.

NOTES

See Figures 1 and 2.

Part 4. Protected Resource Lands Score:

The Protected Resource Lands scoring relies upon the same Zone of Influence information gathered in Part 3, and figures are entered in Site Assessment Worksheet 3, which combines the surrounding agricultural and protected lands calculations.

(1) Use the total area of the ZOI calculated in Part 3. for the Surrounding Agricultural Land Use score.

(2) Sum the area of those parcels within the ZOI that are protected resource lands, as defined in the California Agricultural LESA Guidelines.

(3) Divide the area that is determined to be protected in Step (2) by the total acreage of the ZOI to determine the percentage of the surrounding area that is under resource protection.

(4) Determine the Surrounding Protected Resource Land Score utilizing the Surrounding Protected Resource Land Scoring Table below.

Surrounding Protected Resource Land Scoring Table

Percent of ZOI Protected	Protected Resource Land Score
90-100	100
80-89	95
70-79	90
65-69	85
60-64	80
55-59	70
50-54	60
45-49	50
40-44	40
35-39	30
30-34	20
20-29	10
<20	0

(5) Enter the Protected Resource Land score in box <6> of the **Final LESA Score Sheet** on page 10-A.

NOTES

Final LESA Score Sheet

Calculation of the Final LESA Score:

(1) Multiply each factor score by the factor weight to determine the weighted score and enter in Weighted Factor Scores column.
(2) Sum the weighted factor scores for the LE factors to determine the total LE score for the project.
(3) Sum the weighted factor scores for the SA factors to determine the total SA score for the project.
(4) Sum the total LE and SA scores to determine the Final LESA Score for the project.

	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	<1> 7.01	0.25	1.75
Storie Index	<2> 10.9	0.25	2.73
LE Subtotal		***0.50***	4.48
SA Factors			
Project Size	<3> 100	0.15	15.0
Water Resource Availability	<4> 0.24	0.15	0.04
Surrounding Agricultural Land	<5> 20	0.15	3.0
Protected Resource Land	<6> 0	0.05	0
SA Subtotal		***0.50***	18.04
		Final LESA Score	22.52

For further information on the scoring thresholds under the California Agricultural LESA Model, consult Section 4 of the Instruction Manual.

Section IV. California Agricultural LESA Scoring Thresholds - Making Determinations of Significance Under CEQA

A single LESA score is generated for a given project after all of the individual Land Evaluation and Site Assessment factors have been scored and weighted as detailed in Sections 2 and 3. Just as with the scoring of individual factors that comprise the California Agricultural LESA Model, final project scoring is based on a scale of 100 points, with a given project being capable of deriving a maximum of 50 points from the Land Evaluation factors and 50 points from the Site Assessment factors.

The California Agricultural LESA Model is designed to make determinations of the potential significance of a project's conversion of agricultural lands during the Initial Study phase of the CEQA review process. Scoring thresholds are based upon both the total LESA score as well as the component LE and SA subscores. In this manner the scoring thresholds are dependent upon the attainment of a minimum score for the LE and SA subscores so that a single threshold is not the result of heavily skewed subscores (i.e., a site with a very high LE score, but a very low SA score, or vice versa). Table 9 presents the California Agricultural LESA scoring thresholds.

Table 9. California LESA Model Scoring Thresholds

Total LESA Score	Scoring Decision
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points
80 to 100 Points	Considered Significant

PROJECT SITE

INTERSTATE 15

DEER SPRINGS RD

TWIN OAKS VALLEY ROAD

Legend

- Zone of Influence (ZOI) 8,095 Ac. (Roadways Not Included)
- Project Boundary: 2,384 Ac.[1]
- Williamson Act Agricultural Preserve Lands: 164 Ac.
- Protected Resource Lands: 241 Ac.
- Surrounding Agricultural Lands: 2,516 Ac.
- Other Parcels

[1] Includes Project Site (2327 Ac.), Offsite Improvements to Meadow Park Lane (17 Ac.) and Offsite Improvements to Deer Springs Rd. (40 Ac.)

Agricultural Resources - Zone of Influence

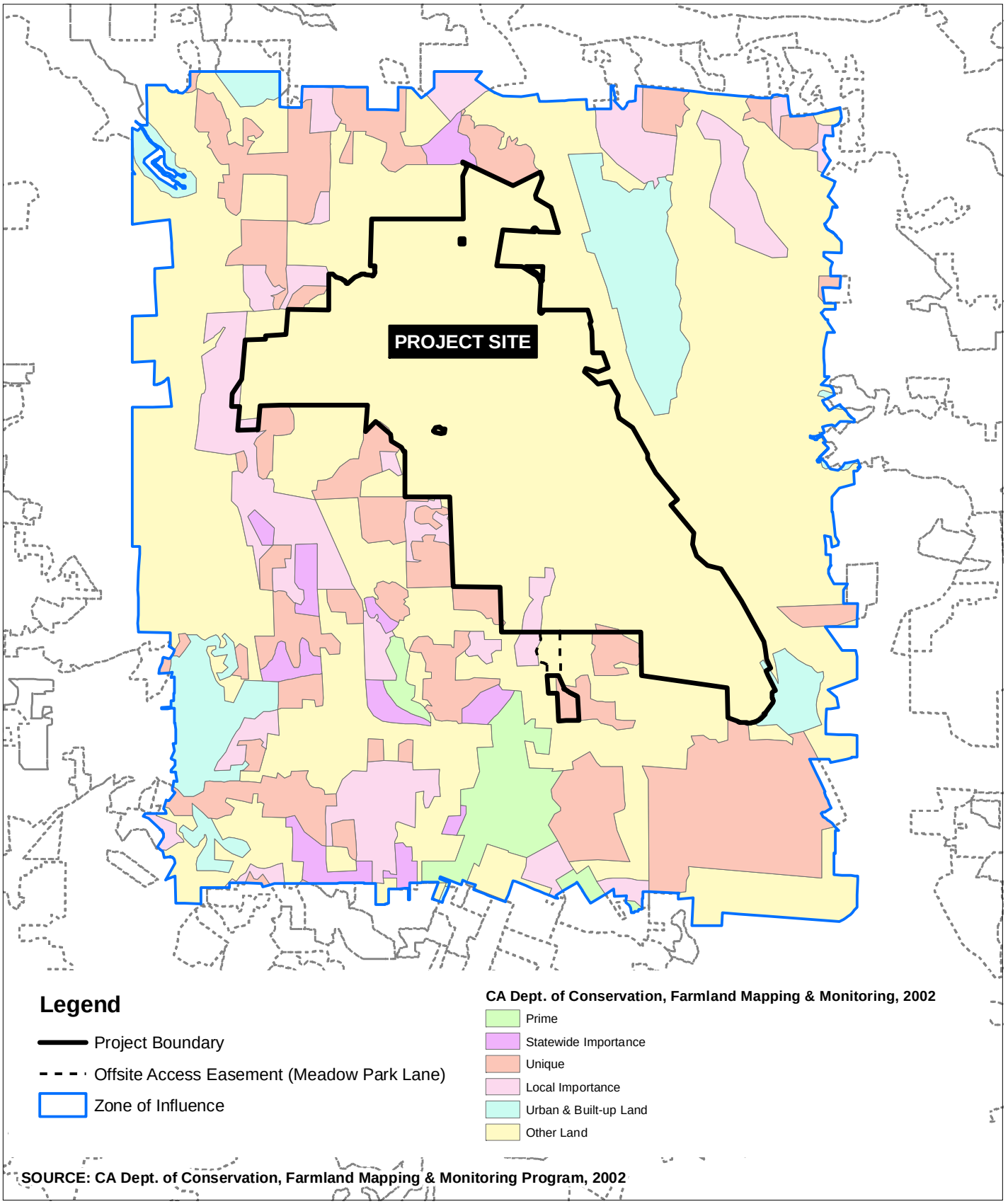
FIGURE 1

MERRIAM MOUNTAINS AGRICULTURAL TECHNICAL REPORT

0 2,000 4,000 8,000

Feet

N



Important Farmlands Areas

FIGURE 2

MERRIAM MOUNTAINS AGRICULTURAL TECHNICAL REPORT

0 2,000 4,000 8,000

Feet

N